TORREYA

November, 1914.

Vol. 14

No. II

THE FLORA OF THE TOWN OF SOUTHOLD, LONG ISLAND AND GARDINER'S ISLAND

By Stewart H. Burnham and Roy A. Latham

The town of Southold is at the eastern end of the north shore of Long Island, extending westward for twenty miles through the villages of Orient, East Marion, Greenport, Southold, Peconic, Cutchogue to Mattituck and Laurel. The topography of the town affords a pleasing variation. On the north, paralleled with the coast of Long Island Sound, are rolling plains and hillocks; now forested, now barren, or broken by low-lying necks of sandy beaches and inlets. On the south, facing the bays and harbors, are extensive salt meadows drained by numerous tidal creeks: the marshes bordered, here and there, by a growth of cedar and hardwood. Between the waterways and tidal creeks sandy beaches extend far out: such areas often being covered with sprawling red cedars, pitch pine and beach plum shrubs. On one of these peninsulas at Orient over seventy-five species of lichens have been found, growing either on the low trees or on the ground: and on a single prostrate cedar fourteen species were found. Fertile, low, level farms lie principally through the center of the town of Southold. Among the more common plants found throughout the town but not known to occur at Orient, are: Skunk-cabbage, beech, witch-hazel, trailing arbutus and mountain laurel. These plants are found at Greenport, six miles west of Orient: and the local flora of these two places seem strangely different.

Gardiner's Island is situated ten miles southeast of Orient and three miles north of the Hampton shore. The flora is quite similar to that found about Orient; excepting the abundance of No. 10, Vol. 14, of TORREYA comprising pp. 167-200 was issued 27 October 1914]

NEV BOT seaside knotweed, sea purslane, sea poppy, New England aster and Scotch thistle. The island is still wooded with the magnificent first-growth oak and beech forests: interposed with high rolling plains and rich luxuriant lowlands, side by side.

Roy A. Latham of Orient, from May 25, 1909, until the present time, collected the following plants: and many of the specimens passed through my hands while in the State Botanist's office at Albany, New York. The major part of the species here listed were collected between Orient and Greenport; where much of the region remains in its original state. A few of the best of the specimens are preserved in the New York State Herbarium; some of the poorer ones were saved; "scrappy" ones were consigned to the waste basket; and several fungi were left unnamed or in doubt.

The arrangement of the list accords with Dr. Smith Ely Ielliffe's. The Flora of Long Island, 1899. The nomenclature of the Myxomycetes follows Dr. Thomas H. Macbride's, North American Slime-Moulds; and that of the Algae, Dr. Bradley M. Davis's, A Catalogue of the Marine Flora of Woods Hole and Vicinity. The nomenclature of the Fungi in most instances follows P. A. Saccardo's, Sylloge Fungorum: and the authors are under great obligation to Dr. Charles H. Peck, State Botanist of New York, for helping solve many difficult problems among the Higher Basidiomycetes. The nomenclature of the Lichens conforms with a modification of the Nylander system; that of the Hepaticae, follows Dr. A. W. Evans: and that of the Musci, Dr. A. J. Grout's, Mosses with Hand-lens and Microscope. The nomenclature of the ferns and flowering plants follows the last edition of Dr. N. L. Britton and A. Brown's, An Illustrated Flora of the Northern States and Canada.

It has seemed best not to arrange the long list of cryptogams according to families and increase the length of this article: but to list the species under botanical orders alphabetically. The ferns and phanerogams are arranged according to families: but the species are listed in alphabetical order.

INSECT GALLS*

Acarus Serotinae Beutm.-Wild Cherry Pouch Gall.

Acraspis erinacei Walsh-Oak Hedgehog Gall.

Amphibolips confluentus Harr.—Oak Apple.

Andricus futilis O. S .- Oak Wart Gall on leaves of Quercus alba.

A. palustris O. S.—Succulent Oak Gall on leaves of Quercus palustris.

A. petiolicola Bass.—Oak Petiole Gall on leaves of Quercus alba and Q. velutina.

A. punctatus Bass.—Oak Knot Gall.

A. seminator Harr.-Oak Seed Gall.

Asteromyia rubra Felt-On leaves of Solidago bicolor.

Aulax tumidus Bass.-Lettuce Tumor Gall.

Biorhiza forticornis Walsh-Oak Fig Gall on twigs of Quercus alba.

Cecidomyia Caryaecola O. S.—Hickory Seed Gall.

C. holotricha O. S.-Hickory Onion Gall.

C. niveipila O. S.-Oak Fold Gall.

C. Nyssaecola Beutm.—On leaves of Nyssa sylvatica.

C. (?) ocellaris Comstock-Maple Spot Gall on leaves of Acer rubrum.

C. sanguinolenta O. S.—Hickory Cone Gall.

C. Serotinae O. S .- Wild Cherry Bud Gall.

Cincticornia pilulae Walsh-Oak Pill Gall on leaves of Quercus velutina.

Cynips Pisum Fitch-Oak Pea Gall.

Cystiphora canadensis Felt-On leaves of Nabalus.

C. viburnifolia Felt-On leaves of Viburnum acerifolium and V. dentatum.

Dasyneura Galii Felt-On flower buds of Galium.

D. Salicifolia Felt-On young willow leaves.

Diastrophus Cuscutaeformis O. S.-Blackberry Seed Gall.

D. nebulosus O. S .- Blackberry Knot Gall.

D. niger Bass.—On leaves of Potentilla canadensis.

Dryophanta polita Bass.—Polished Oak Gall.

Erineum fagineum Pers.-Beechleaf Mite Gall.

Eriophyes abnormis Garman-A mite gall on leaves of Tilia americana.

E. Nyssae Trotter-On leaves of Nyssa sylvatica.

E. Querci Garman-On leaves of Quercus velutina.

Gnorimoschema gallaesolidaginis Riley-On stems of Solidago serotina.

Holcaspis globulus Fitch-Oak Bullet Gall.

Hormaphis Hamamelidis Fitch-Witch Hazel Cone Gall.

H. spinosus Shiner-Spiny Witch Hazel Gall.

Hormomyia Crataegifolia Felt-On leaves of Crataegus.

Itonida foliora Russ. & Hook.—On margin of leaves of Quercus velutina.

Lasioptera farinosa Beutm.—On leaf veins of Rubus.

L. Lycopi Felt-On stems of Lycopus.

L. virginica Felt-On stems of Triadenum virginicum.

L. Vitis O. S.—Grape-vine Tomato Gall.

Nematus pomum Walsh-Willow Apple Gall.

Neolasioptera Erigerontis Felt-On stems of Leptilon canadense.

* The majority of these galls were named by Dr. E. P. Felt, state entomologist of the state of New York.

N. vitinea Felt-On petioles of grape leaves.

Neuroterus batatus Fitch-Oak Potato Gall on twigs of Quercus alba.

N. majalis Bass.-On leaves of Quercus alba.

Obolodiplosis Robiniae Hald .- On leaves of Robinia Pseudo-Acacia.

Oligotrophus salicifolius Felt-On leaves of Salix discolor.

Pachypsylla Celtidis-gemma Riley—Hackberry Nodule Gall.

P. Celtidis-mamma Riley-Hackberry Nipple Gall.

Pemphigus Populicaulis Fitch-Poplar Stem Gall.

P. Rhois Fitch—Sumac Tomato Gall on leaves of Rhus glabra.

Phylloxera Carvaecaulis Fitch-Hickory Louse Gall.

P. Caryae-globuli Walsh

P. vastatrix Planch.—Grape Phylloxera.

P. vitifoliae Fitch

Rhabdophaga Salicifolia Felt-On leaves of Spirea latifolia.

Rhodites bicolor Harr.—Spiny Rose Gall.

R. dichlocerus Harr.—Long Rose Gall.

R. globosus Beutm.-Globular Rose Gall.

R. ignota O. S.-Mealy Rose Gall.

R. verna O. S .-- Knotty Rose Gall.

Rhopalomyia anthophila O. S.-On leaves of Solidago.

R. capitata Felt-On stems of Solidago.

R. lateriflora Felt-On stems of Aster ericoides.

R. racemicola O. S .- On flowers of Solidago rugosa.

Sackenomyia viburnifolia Felt-On leaves of Viburnum dentatum.

Solenozopheria Vaccinii Ashm.—Huckleberry Gall on stems of Gaylussacia baccata. Trypeta polita Lw.—Goldenrod Gall.

THALLOPHYTA

MYXOTHALLOPHYTA

Мухомусетеѕ

Arcyria cinerea (Bull.) Pers.—On rotten wood of oak.

A. denudata (L.) Sheldon-On hickory and cherry.

Ceratiomyxa fruticulosa (Muell.) Macbr.—On rotten wood.

Fuligo ovata (Schaeff.) Macbr.-On old oak trunks.

Hemitrichia serpula (Scop.) Rost.—On old hickory wood.

H. vesparium (Batsch) Macbr.-On old hickory wood.

Lycogala epidendrum (Buxb.) Fr.-On pine stumps, hickory and oak.

Plasmodiophora Brassicae Woron.—On roots of Brassica oleracea; determined at Bureau of Plant Industry, Washington.

Reticularia Lycoperdon Bull.—On Sassafras Sassafras.

Stemonites Smithii Macbr.-On old logs.

Trichia favoginea (Batsch) Pers.—On old wood of Robinia Pseudo-Acacia.

EUTHALLOPHYTA

EUPHYCEAE*

Agardhiella tenera (Ag.) J. Ag.

Ahnfeltia plicata (Huds.) Fr.

* The marine algae were mostly determined by Dr. M. A. Howe and are preserved in the Herbarium of the New York Botanical Garden.

Anabana torulosa (Carm.) Lag.

Antithamnion Pylaisaei (Mont.) Kjellm.

Ascophyllum nodosum (L.) LeJolis

Callithamnion Baileyi Harv.

C. byssoideum Arn.

Ceramium fastigiatum Harv.

C. rubrum (Huds.) Ag.

C. tenuissimum (Lyngyb.) J. Ag.—Greenport.

Chaetomorpha Linum (Müll.) Kütz.

Champia parvula (Ag.) Harv.

Chlorococcum humicola (Naeg.) Rabenh.—A fresh-water alga on a piece of wood.

Chondria tenuissima (Good. & Woodw.) Ag.

Chondrus crispus (L.) Stackh.

Chorda filum (L.) Stackh.

Chordaria flagelliformis (Müll.) Ag.

Cladophora arcta (Dillw.) Kütz.

C. expansa (Mert.) Kütz.

C. flexuosa (Griff.) Harv.

C. gracilis (Griff.) Kütz.

Corallina officinalis L.

Cystoclonium purpurascens (Huds.) Kütz.

Dasya pedicellata Ag.

Delesseria sinuosa (Good. & Woodw.) Lamour.

Dermatolithon pustulatum (Lamour.) Fosl.—On leaves of Zostera.

Desmarestia aculeata (L.) Lamour.

D. viridis (Müll.) Lamour.

Dictyosiphon foeniculaceus (Huds.) Grev.

Ectocarpus confervoides (Roth) LeJolis

E. fasciculatus Harv.

E. siliculosus (Dillw.) Ag.

Enteromorpha compressa (L.) Grev.

E. intestinalis (L.) Grev.

E. linza (L.) J. Ag.

E. percursa (Ag.) J. Ag.

E. plumosa Kütz.

Epilithon membranaceum (Esp.) Heyd.

Fucus evanescens Ag.

F. spiralis L.

F. vesiculosus L.

Gracilaria confervoides (L.) Grev.

Gymnogongrus Torreyi (Ag.) J. Ag.—Dr. Howe says: "probably only a flattened variety of Ahnfeltia plicata (Huds.) Fr."

Halothrix lumbricalis (Kütz.) Reinke-On leaves of Zostera.

Hildebrandia prototypus Nardo

Hypnea musciformis (Wulf.) Lamour.

Isactis glauca Thuret

Laminaria Agardhii Kjellm.

L. digitata (L.) Lamour.

Leathesia difformis (L.) Aresch.—Probably the young thalli on Zostera.

Lithophyllum pustulatum (Lamour.) Fosl.

Lomentaria uncinata Menegh.

Melobesia Lejolisii Rosan.—On leaves of Zostera.

Mesogloia divaricata (Ag.) Kütz.

Monostroma leptoderma Kjellm.

M. undulatum Farlowii Fosl.

Petalonia fascia (Müll.) Kütz.

Phyllophora membranifolia (Good. & Woodw.) J. Ag.

Polyides rotundus (Gmel.) Grev.

Polysiphonia elongata (Huds.) Harv.

P. Harveyi Bailey

P. nigrescens (Dillw.) Grev.

P. Olneyi Harv.

P. urceolata (Lightf.) Grev.

P. urceolata formosa (Suhr) J. Ag.

P. variegata (Ag.) Zanard.

Punctaria latifolia Grev.

Pylaiella littoralis (L.) Kjellm.

Rhodermis Georgii (Batt.) Collins-On leaves of Zostera.

Rhodomela subfusca (Woodw.) Ag.—Also the red form, approaching Rhodomela Rochei Harv.

Rhodymenia palmata (L.) Grev.

Sargassum Filipendula (Ag.) J. Ag.

Scytosiphon lomentarius (Lygyb.) J. Ag.

S. lomentarius complanatus Rosev.

Spermothamnium Turneri (Mert.) Aresch.—Attached to the base of Polysiphonia elongata.

Sphacelaria cirrhosa (Roth) Ag.

Spyridia filamentosa (Wulf.) Harv.

Sterrocolax decipiens Schmitz.—"Abundant on Gymnogongrus Torreyi, which fact may be interpreted as strengthening the idea that G. Torreyi is only a form of Ahnfeltia plicata."*

Stilophora rhizodes (Ehrh.) J. Ag.

Ulothrix flaccida (Dillw.) Thuret

Ulva Lactuca L.

U. Lactuca latissima (L.) DC.

FUNGI

SCHIZOMYCETES

Bacillus amylovorus (Burr.) DeToni-On leaves of Pyrus communis.

EUMYCETES

PHYCOMYCETES

Bremia Lactucae Regel-On Lactuca leaves.

Cystopus candidus (Pers.) Lev.—On Bursa Bursa-pastoris and other mustards.

*Some Midwinter Algae of Long Island Sound, by M. A. Howe in Torreya 14: 97-101. June, 1914 (Contr. N. Y. Botanical Garden No. 169).

Mucor Mucodo L.—On beet stored in a cellar; determined at Cornell by Prof. Fitzpatrick.

Rhizopus nigricans Ehrenb.—On stale bread.

ASCOMYCETES (EXCLUDING PYRENOMYCETES)

Belonidium aurelia (Pers.) DeNot.—On old wood of Robinia Pseudo-Acacia; specimens in N. Y. State Herbarium.

Bulgaria inquinans (Pers.) Fr.

Chlorosplenium aeruginosum (Oeder) DeNot.—On old wood of Acer rubrum.

C. Schweinitzii Fr.

Coccomyces Juniperi Karst.—On bark of Juniperus virginiana; specimens in N. Y. State Herbarium. (Colopoma Juniperinum C. & P.)

Dasyscypha calcycina (Schum.) Fckl.—On bark of Pinus rigida.

D. virginea (Batsch) Fckl.-On oak.

Discina orbicularis Pk.—On old wood of hickory and cherry.

Durella corrugata (C. & P.) Sacc.—On oak twigs; specimens in N. Y. State Herbarium.

Exoascus deformans (Berk.) Fckl.—On leaves of Amygdalus persica.

E. varius Atk .- On leaves of Padus virginiana.

Geoglossum velutipes Pk .- On ground in woods.

Geopyxis hesperidea Cke. & Pk.—On logs; specimens in N. Y. State Herbarium.

Gyromitra esculenta (Pers.) Fr.-Rare in cedar woods at Orient.

Helotium citrinum (Hedw.) Fr.-On old oak and hickory wood.

Helvella macropus (Pers.) Karst.

Humaria granulata (Bull.) Sacc.—On cow dung and old potato stems; specimens in N. Y. State Herbarium.

Lachnea scutellata (L.) Gill.-On old oak wood.

L. setosa (Nees) Gill.—East Marion on rotten stumps.

Lecanidion indigoticum (C. & P.) Sacc.—Specimens in N. Y. State Herbarium.

Leotia lubrica (Scop.) Pers.

Mollisia melaleuca (Fr.) Sacc .- On old wood of Robinia Pseudo-Acacia.

Morchella conica Pers.

M. deliciosa Fr.

M. esculenta (L.) Pers.—The morels all grow in sandy soil, at Orient.

Phaeangella deformata (Pk.) Sacc. & D. Sacc.—Growing in lines on bark of Juniperus virginiana; specimens in N. Y. State Herbarium.

Propolis faginea (Schrad.) Karst.—On old wood of willow and hickory; specimens in N. Y. State Herbarium.

Rhytisma acerinum (Pers.) Fr.—Greenport on leaves of Acer rubrum.

R. decolorans Fr.—Greenport on leaves of Xolisma ligustrina and Vaccinium.

R. Solidaginis Schw.—On leaves of Solidago.

R. Vitis Schw.—On leaves of grape; determined by Mrs. F. W. Patterson; specimens in N. Y. State Herbarium.

Sarcoscypha occidentalis Schw.

Sclerotinia fructigena (Pers.) Schroet.—On fruit of Amygdalus persica.

S. Libertiana Fckl.-Determined at Bureau of Plant Industry.

Tapesia fusca (Pers.) Fckl.-On oak.

ASCOMYCETES (PYRENOMYCETES)

Botryosphaeria Berengeriana (DeNot.)—On twigs of Toxicodendron radicans.

Calosphaeria Myricae (C. &. E) E. & E.—On dead Myrica carolinensis branches; reported in N. Y. State Mus. Bull. 167: 24. 1913.

Coronophora angustata Fckl.—On dead Myrica carolinensis trunks; reported in N. Y. State Mus. Bull. 157: 24. 1912.

Daldinia concentrica (Bolt.) Ces. & DeNot.—On oak and hickory.

D. vernicosa (Schw.) Ces. & DeNot.—On old wood of Fagus grandiflora.

Diaporthe parasitica Murrill-On Castanea dentata.

Diatrype albopruinosa (Schw.) Cke.—On Fagus grandiflora.

D. stigma (Hoffm.) Fr.-On old wood of oak.

Diatrypella betulina (Pk.) Sacc.—Greenport.

D. prominens (Howe) E. & E.—On Platanus occidentalis.

D. Rhois (Schw.) E. & E.-On Toxicodendron radicans.

Dothidea Baccharidis Cke.—On dead branches of Baccharis halimifolia; determined by Mrs. F. W. Patterson; reported in N. Y. State Mus. Bull. 167: 26. 1913.

 ${\it Eutypella~clavulata~Cke.} \hbox{--} \hbox{On dead branches of} ~\it Ailanthus~glandulosa.$

E. longirostris Pk.—On dead twigs of Robinia Pseudo-Acacia.

E. stellulata (Fr.) Sacc.—On hickory, oak, Amelanchier and Robinia Pseudo-Acacia. Eutypa spinosa (Pers.) Tul.—On old wood of oak.

Gloniopsis australis (Duby) Sacc.—Old wood of oak, Betula populifolia, Sassafras Sassafras and Vitis; specimens in N. Y. State Herbarium.

Glonium parvulum (Ger.) Sacc.—Decorticated wood; reported in N. Y. State Mus. Bull. 150: 45. 1911.

Herpotrichia diffusa (Fckl.) E. & E.—On decaying wood of Robinia Pseudo-Acacia; reported in N. Y. State Mus. Bull. 150: 45. 1911.

Hypoxylon atropunctatum (Fckl.) Cke.—On old wood of oak.

H. coccineum Bull.—On old wood of oak and Malus Malus.

H. fuscopurpureum (Schw.) Berk.—On old wood of hickory.

H. fuscum (Pers.) Fr.—On old wood of Fagus grandiflora.

H. Sassafras (Schw.) Berk.—On old wood of Sassafras Sassafras.

H. serpens (Pers.) Fr.—Greenport on hickory and Quercus alba; specimens in N. Y. State Herbarium.

Hysteriographium Mori (Schw.) Rehm—On old wood of oak, Platanus occidentalis, Malus Malus, Ligustrum vulgare and Baccharis halimifolia.

Hysterium Thujarum Cke. & Pk.—Determined by Dr. F. J. Seaver.

Hysterium pulicare Pers.—On old wood of Robinia Pseudo-Acacia and Rhus; specimens in N. Y. State Herbarium.

Massaria inquinans (Tode) Fr.

M. vomitoria B. & C.—On Acer rubrum.

Nectria cinnabarina (Tode) Fr.—Also the conidial form, Tubercularia vulgaris
Tode on dead wood of many species of trees and shrubs.

N. episphaeria (Tode) Fr.—Parasitic on Diatrype stigma.

Nummularia clypeus (Schw.) Cke.—On oak stump.

N. discreta (Schw.) Tul.—On old branches of Malus Malus.

Phyllachora graminis (Pers.) Fckl.—On leaves of grasses.

Plowrightia morbosa (Schw.) Sacc.—Branches of Prunus maritima and cultivated quince.

Rosellinia mutans (C. & P.) Sacc.—On hickory; specimens in N. Y. State Herbarium.

R. subiculata (Schw.) Sacc.—Greenport on Fraxinus americana.

Sphaerella Fragariae (Tul.) Sacc.—On leaves of Fragaria virginiana.

Ustulina vulgaris Tul.—On oak stumps.

Valsa ambiens (Pers.) Fr.—On dead branches of Fagus grandiflora.

V. Linderae Pk.—On dead twigs of Benzoin aestivale; specimens in N. Y. State Herbarium.

V. rhoöphila C. & E.—On dead branches of Rhus; specimens in N. Y. State Herbarium.

Xylaria polymorpha (Pers.) Grev.—On hickory stump.

HYPOMYCETES

Alternaria Brassicae (Berk.) Sacc.—On old plants of Ricinus communis and Brassica oleracea; determined at Cornell University.

Cercospora leptosperma Pk.—On leaves of Aralia nudicaulis; determined by Dr. H. D. House.

Illosporium roseum (Schreb.) Mart.—On Physcia stellaris.

Macrosporium commune Rabenh.—On leaves of cucumber and watermelon.

Microstroma Juglandis (Bereng.) Sacc.—On hickory leaves.

Monilia Peckiana S. & V.—On leaves of Gaylussacia baccata; specimens in N. Y. State Herbarium.

Oospora scabes Thaxt.—Common and very bad on potatoes.

Ovularia obliqua (Cke.) Oud.—On leaves of Rumex.

Pilacre faginea (Fr.) B. & Br.

Piricularia grisea (Cke.) Sacc.—On leaves of Chaetochloa italica.

Polythrincium Trifolii Kze.—On leaves of Trifolium pratense; determined by Dr. I. C. Arthur.

Ramularia Armoraciae Fckl.—On leaves of Armoracia Armoracia.

R. lineola Pk.—On leaves of Leontodon Taraxacum.

R. Plantaginis E. & M.—The var. nigromaculans Pk., on leaves of Plantago major.

Rhinotrichum ramosissimum B. & C.—On cherry limbs.

Streptothrix fusca Cda.—On Juniperus virginiana; specimens in N. Y. State Herbarium.

MELANCONIALES

Coryneum pulvinatum K. & S.—On dead branches of Tilia americana.

C. pustulatum Pk.—On dead branches of Castanea sativa; specimens in N. Y. State Herbarium.

Gloeosporium intermedium brevipes Sacc.—On leaves of the cultivated rubber-plant. (Gloeosporium elasticae Cke. & Mass.)

Pestalozzia adusta E. & E.—On leaves of Padus virginiana.

P. funerea Desm.—On dead twigs of Juniperus virginiana.

P. longiseta Speg.—On leaves of Rubus and Aronia. The three species of Pestalozzia are reported in N. Y. State Mus. Bull. 157: 30. 1912.

Steganos porium fenestratum (E. & E.) Sacc.—On dead branches of Clethra alnifolia; reported in N. Y. State Mus. Bull. 157: 34. 1912.

SPHAEROPSIDEAE

- Amerosporium oeconomicum Ell. & Tracy—On bean leaves; determined by Mrs. F. W. Patterson.
- Ascochyta Rhei E. & E.—On leaves of Rheum rhaponticum; reported in N. Y. State Mus. Bull. 157: 22. 1912.
- Camaros porium abnorme (Pk.) Sacc.—On stems of Celastrus scandens.
- C. Maclurae Pk.—On dead branches of Toxylon pomiferum; Orient is the type station for this species; reported and described in N. Y. State Mus. Bull. 157: 23. 1012.
- Cytospora chrysosperma (Pers.) Fr.—On dead branches of poplar.
- C. Salicis (Cda.) Rabenh.—On dead willow branches; reported in N. Y. State Mus. Bull. 157: 25. 1912.
- Dendrophoma Tiliae Pk.—On Tilia americana; specimens in N. Y. State Herbarium.
- Diplodia ruborum (Schw.) Sacc.—On Rubus.
- D. virginiana Cke. & Rav.—On dead twigs of Juniperus virginiana.
- Haplosporella Ribis Sacc.—On dead stems of Grossularia; reported in N. Y. State Mus. Bull. 157: 27. 1912.
- Hendersonia Grossulariae Oud.—On dead and dying stems of Grossularia reclinata; reported in N. Y. State Mus. Bull. 157: 28. 1912.
- H. pubentis Cke.—On dead stems of Sambucus canadensis.
- Macrophoma albifructa (Pk.) Berl. & Vogl.—On dead maple twigs.
- M. Juniperina Pk.—On dead Juniperus virginiana twigs; Orient is the type station for this species; reported and described in N. Y. State Mus. Bull. 167: 28. 1913.
- Phlyctaena septorioides Sacc.—On dead stems of Phytolacca americana.
- Phoma ampelinum B. & C.—On grape leaves.
- P. Asclepiadea E. & E.—On stems of Asclepias syriaca; reported in N. Y. State Mus. Bull. 167: 30. 1013.
- P. Baccharidis Brun.—On dead stems of Baccharis halimifolia.
- P. corylina (Thuem.) Sacc.—On dead stems of Corylus.
- P. herbarum West.—On dead stems of Lilium, Rheum rhaponticum and Solidago.
- P. moricola Sacc.—On dead twigs of Morus.
- P. sambucina Sacc.—On dead twigs of Sambucus canadensis.
- P. semiimmersa Sacc.—On dead branches of Crataegus; reported in N. Y. State Mus. Bull. 167: 30. 1913.
- Phoma Smilacis Boy. & Jacz.—On dead stems of Smilax rotundifolia; reported in N. Y. State Mus. Bull. 157: 32. 1912.
- Phyllosticta Betae Oud.—On leaves of beet.
- P. circumscissa Cke.—On leaves of Amygdalus persica.
- P. cruenta (Fr.) Kx.—On leaves of Vagnera racemosa; determined by Mrs. Patterson.
- P. Digitalis Bell.—On leaves of Digitalis.
- P. Iridis E. & M.—On leaves of Iris versicolor; determined by Mrs. Patterson.
- P. Labruscae Thuem.—On leaves of Parthenocissus tricuspidata.
- P. phomiformis Sacc.—On leaves of Quercus alba.
- P. rhoicola E. & E.—On leaves of Toxicodendron radicans; reported in N. Y. State Mus. Bull. 167: 30. 1913.
- P. Smilacis E. & M.—On leaves of Smilax rotundifolia; determined by Mrs. Patterson.

- Septoria Dianthi Desm.—On leaves of Dianthus; reported in N. Y. State Mus. Bull. 157: 33. 1912.
- S. Kalmiaecola (Schw.) B. & C.—Leaves of Kalmia latifolia at Greenport and East Marion.
- S. Oenotherae West .- On leaves of Oenothera.
- S. Polygonina Thuem.—On leaves of Persicaria.
- S. Ribis Desm.—On leaves of Ribes vulgare.
- S. Rubi West .- On leaves of Rubus.
- Sphaeropsis Malorum Pk.—On dead branches of Malus Malus.
- S. Peckii Sacc .- On dead twigs of Padus virginiana. (Sphaeropsis anomala Pk.)
- S. Persicae E. & B.—On dead branches of Amygdalus persica; specimens in N. Y. State Herbarium.
- S. Tiliacea Pk.—On dead branches of Tilia americana.

BASIDIOMYCETES

USTILAGINACEAE

Cintractia Junci (Schw.) Trel.—On Juncus tenuis.

Urocystis soros porioides Koern.—On Thalictrum; determined by Dr. G. P. Clinton. Tolypos porium bullatum (Schroet.) Schroet.—Fruiting panicles of Echinochloa

Crus-galli; determined at Bureau of Plant Industry.

Ustilago anomala Kze.-On Tiniaria Convolvulus.

- U. Avenae (Pers.) Jens.—On panicles of Avena sativa.
- U. hypodytes (Schl.) Fr.—Probably on Agropyron; determined by Dr. Clinton, who says, "an uncommon smut for this host."
- U. Maydis (DC.) Cda.—On Indian corn.
- U. Tritici (Pers.) Jens.—On Triticum.
- U. utriculosa (Nees) Tul.-On Polygonum.

MELAMPSORACEAE

- Melampsora arctica Rostr.—On leaves of Salix discolor; determined by Dr. J. C. Arthur,* who says, "the most southern collection known for this species." (Uredo Rostrupiana Arth.)
- M. Bigelowii Thuem.—Greenport on willow leaves.

Melampsoridium Betulae (Schum.) Arth.—Determined by Dr. Arthur.

COLEOSPORIACEAE

Coleosporium Solidaginis (Schw.) Thuem.—On leaves of Aster and Solidago; determined in part by Dr. Arthur and Dr. F. D. Fromme.

PUCCINIACEAE

Aecidium Majanthae Schum.—Orient on leaves of Vagnera racemosa,

A. Uvulariae Schw.—Orient on leaves of Uvularia sessilifolia.

Gymnoconia interstitialis (Schlect.) Lagh.—Orient on leaves of cultivated and wild Rubi.

Gymnosporangium germinale (Schw.) Kern.—The summer stage, Roestelia auran* Specimens determined by Dr. J. C. Arthur and Dr. F. D. Fromme are preserved in the Herbarium of Dr. Arthur at Purdue University, Lafayette, Indiana.
The authors are indebted to Dr. Arthur, who has read the manuscript of the
Rusts, and who made valuable suggestions.

- tiaca Pk., on leaves of Amelanchier, Crataegus and quince. (Gymnosporangium clavibes C. & P.)
- G. Juniperi-Virginianae Schw.—The summer stage, Roestelia pyrata (Schw.) Thaxt., on Malus Malus leaves; and the winter stage on Juniperus virginiana at Orient; specimens in N. Y. State Herbarium. (Gymnosporangium macropus Link.)
- G. nidus-avis Thaxt.—The summer stage on leaves of Amelanchier, determined by Dr. Arthur: and the winter stage on Juniperus virginiana at Orient.
- Kuehneola obtusa (Strauss) Arth.—On leaves of Potentilla canadensis; determined by both Dr. Arthur and Dr. Fromme.

Puccinia Asparagi DC .- On Asparagus officinalis.

- P. Asteris Duby-On Aster novi-belgii; determined by Dr. Arthur.
- P. Caricis-Asteris Arth.—Determined by Dr. Fromme.
- P. Caricis-Solidaginis Arth.—On Carex; determined by Dr. Arthur.
- P. Cicutae Lasch.—On leaves of Cicuta maculata at Orient and Greenport; determined by Dr. Arthur, who says this species has been previously collected in "three widely separated localities, Florida, Nova Scotia and Nevada."
- P. coronata Cda.—On leaves of Rhamnus cathartica and Nothoholcus lanatus; determined by Dr. Arthur; also on leaves of Avena sativa. (Puccinia Rhamni (Pers.) Wettst.)
- P. Cyani (Schleich.) Pass.—On Centaurea cyanus; determined by Dr. Arthur.
- Puccinia Eleocharidis Arth.—On leaves of Eupatorium; determined by Dr. Arthur.
- P. graminis Pers.—On leaves of grasses; the aecia on leaves of Berberis vulgaris.
- P. Grossulariae (Pers.) Lagerh.—On Carex virescens; determined by Dr. Arthur.
- P. Helianthi Schw.—On leaves of Helianthus.
- P. Hieracii (Schum.) Mart.—On leaves of Hieracium Gronovii; determined by Dr. Arthur.
- P. Malvacearum Mont.—Orient on leaves of Malva rotundifolia and Althaea rosea.
- P. Menthae Pers.—On leaves of Koellia; determined by Dr. Fromme.
- P. obscura Schroet.—On Juncoides campestre; determined by Dr. Arthur.
- P. orbicula Pk.—On leaves of Nabalus trifoliatus; determined by Dr. Arthur.
- P. Peckii (DeToni) Kellerman—Orient on leaves of Oenothera; determined by Mrs. F. W. Patterson.
- P. Pimpinellae (Strauss) Link-Orient on leaves of Washingtonia Claytoni.
- P. Pruni-spinosae Pers.—On leaves of Prunus avium and Padus virginiana; determined by Dr. Arthur. (Tranzschelia punctata (Pers.) Arth.)
- P. Sambuci (Schw.) Arth.—On leaves of Carex crinita and C. lurida; determined by Dr. Arthur; also the aecia on leaves of Sambucus canadensis at Orient.
- P. Seymouriana Arth.—The aecia on leaves of Asclepias pulchra and the telia on Spartina at Orient; determined by Dr. Arthur who says, "in west-central United States the aecia are found also on Apocynum and Cephalanthus."
- P. Sorghi Schw.—On leaves of sweet corn.
- P. Taraxaci Plowr.—On leaves of Leontodon Taraxacum; determined by Dr. Arthur.
- P. triticina Erikss.—On various species of Triticum; determined in part by Dr. Arthur. (Puccinia Rubigo-vera (DC.) Wint.)
- P. uniporula Orton-On Carex virescens; determined by Dr. Fromme.
- P. Violae (Schum.) DC.—On leaves of Viola primulifolia at Greenport; determined by Dr. Fromme.

- Uromyces appendiculatus (Pers.) Fr.—On leaves of Strophostyles helvola; determined by Dr. Arthur. (Nigredo appendiculata (Pers.) Arth.)
- U. Caladii (Schw.) Farl.—Greenport on leaves of Arisaema triphyllum and Peltandra virginica.
- U. Lilii Clinton—On leaves of Lilium; determined by Dr. Arthur. (Nigredo Lilii (Clinton) Arth.)
- U. Limonii (DC.) Lev.—On leaves of Limonium carolinianum; determined by Dr. Arthur.
- U. Peckianus Farl.—Orient on Distichlis spicata. Doubtless the Aecidium atriplicis Shear, reported in N. Y. State Mus. Bull. 157: 21. 1912, on leaves of Atriplex hastata at Orient belongs here. Aecidium atriplicis is a rust which has only been reported on shrubby species of Atriplex in the arid regions of western United States.
- Uromyces Silphii (Burrill) Arth.—On Juncus tenuis; determined by Dr. Fromme. (Nigredo Silphii (Burrill) Arth.)
- U. Spartinae Farl.—Orient on Spartina; determined by Dr. Arthur.
- U. Toxicodendri B. & R.—Orient on leaves of Toxicodendron radicans; determined in part by Dr. Arthur. (Pileolaria Toxicodendri (B. & R.) Arth.)

TREMELLACEAE

Exidia glandulosa (Bull.) Fr.—On old oak and trunks of other trees.

Tremella aurantia Schw.—On bark of Juniperus virginiana.

T. frondosa Fr.—On oak stumps.

DACRYOMYCETACEAE

Calocera cornea Fr.

Dacryomyces stillatus Nees-On old pine logs.

Guepinia spathularia (Schw.) Fr.—Growing from crevices of an old log.

EXOBASIDIACEAE

Exobasidium Vaccinii (Fckl.) Woron.—On fruit of Gaylussacia baccata.

THELEPHORACEAE

Aleurodiscus Oakesii (B. & C.) Cke.—On the bark of living trunks of Ostrya virginiana.

Corticium effuscatum C. & E.-On hickory.

C. lacteum Fr.-On cherry and Rhus.

C. roseolum Mass.—On hickory and Vaccinium.

Craterellus cornucopioides (L.) Pers.-Greenport.

Hymenochaete corrugata (Fr.) Lev.-On hickory.

- H. Curtisii (Berk.)—On Quercus alba and Padus virginiana. (Stereum Curtisii Berk.)
- H. rubiginosa (Schrad.) Lev.—On oak and Castanea sativa logs; specimens in N. Y. State Herbarium.
- H. tabacina (Sow.) Lev.—On hickory, Myrica carolinensis and cherry; specimens often resupinate.
- Peniophora cinerea (Fr.) Cke.—On dead branches of Betula populifolia, Padus virginiana and maple.

Solenia fasciculata Pers.-On hickory.

S. ochracea Hoffm.—On rotten wood of hickory; specimens in N. Y. State Herbarium.

Stereum acerinum Pers.-On hickory and maple.

- S. acerinum nivosum Rav.—On dead branches of Juniperus virginiana; specimens in N. Y. State Herbarium.
- S. complicatum Fr.-On old limbs.
- S. frustulosum (Pers.) Fr.—On oak stumps.
- S. hirsutum (Willd.) Fr.—On hickory and Nyssa sylvatica.
- S. ochraceo-flavum Schw.-On Amelanchier.
- S. purpureum Pers.—On hickory and Acer rubrum; sometimes resupinate.
- S. sericeum Schw.—On oak, Myrica carolinensis and Nyssa sylvatica.
- S. spadiceum Fr.—On oak.
- S. versiforme B. & C.—On Hamamelis virginiana.
- S. versicolor Fr.-On oak.

Thelephora caryophyllea (Schaeff.) Pers.—In cedar woods.

- T. intybacea Pers.—Greenport in woods.
- T. palmata (Scop.) Fr.—The var. americana Pk. in woods.
- T. terrestris Ehrh.—In sandy soil.

CLAVARIACEAE

Clavaria amethystina Bull.—Greenport and Orient.

- C. aurea Schaeff.
- C. botrytis Pers.—Greenport and Orient.
- C. cinerea Bull.
- C. coralloides L.—Greenport.
- C. cristata Pers.-Greenport.
- C. formosa Pers.
- C. fusiformis Sow.
- C. mucida Pers.—Rotten oak logs on Gardiner's Island.
- C. muscoides L.
- C. pulchra Pk.
- Sparassis crispa (Wulf.) Fr.—Greenport in woods.

HYDNACEAE

Hydnum aurantiacum (Batsch) A. & S.

- H. chrysocomum Underw .- On oak.
- H. farinaceum Pers.-On old hickory wood.
- H. ochraceum Pers.—On cherry and Malus Malus; sometimes resupinate.
- H. scrobiculatum Fr.—Greenport.
- H. spongiosipes Pk.—In cedar woods.
- H. subfuscum Pk.
- H. velatum B. & C .- On hickory.

Irpex ambiguus Pk .-- On pine log.

- I. cinnamomeus Fr.—On oak, Fagus grandiflora and Vaccinium.
- I. lacteus Fr.—On dead branches of Ilex verticillata.
- I. mollis B. & C .- On cherry.
- I. paradoxus (Schrad.) Fr.—On Padus virginiana.
- I. sinuosus Fr.—On dead branches of Padus virginiana.
- I. Tulipiferae Schw.—On hickory, oak, Malus Malus and Baccharis halimifolia.

Phlebia radiata Fr.

POLYPORACEAE

- Boletus affinis Pk.—Sandy woods.
- B. affinis maculosus Pk.
- B. auriporus Pk.
- B. Ballouii Pk.—Greenport; reported in N. Y. State Mus. Bull. 157: 22. 1912.
- B. castaneus Bull.
- B. chrysenteron Fr.
- B. felleus Bull.
- B. pallidus Frost
- B. rubropunctus Pk.
- B. scaber Fr.—Greenport.
- B. subglabripes Pk.
- B. subvelutipes Pk.—Sandy soil.

Daedalea confragosa rubescens (A. & S.) Pk.—On willow, Betula populifolia, Nyssa sylvatica and Fraxinus americana. (Trametes rubescens (A. & S.) Fr.)

D. quercina (L.) Pers.—On oak and Padus virginiana.

Daedalea unicolor (Bull.) Fr.-On hickory and oak.

Favolus canadensis Klotsch.—On dead limbs of Fagus grandiflora.

Fomes annosus Fr.—On Juniperus virginiana; specimens in N. Y. State Herbarium.

- F. applanatus (Pers.) Fr.—On hickory and cherry.
- F. carneus Nees-On Juniperus virginiana.
- F. rimosus Berk.—On Robinia Pseudo-Acacia; specimens in N. Y. State Herbarium.
- F. salicinus (Pers.) Fr.—On willow.

Ganoderma pseudoboletus (Jacq.) Murrill-On oak.

Gloeoporus conchoides Mont.—On hickory and oak.

Merulius tremellosus Schrad.—On dead wood of cherry.

M. Ulmi Pk.—On dead Myrica carolinensis; reported in N. Y. State Mus. Bull. 157: 41. 1912.

Polyporus betulinus (Bull.) Fr.—On Betula populifolia.

- P. brumalis (Pers.) Fr.-On oak.
- P. caesius (Schrad.) Fr.-On Malus Malus.
- P. chioneus Fr.—On oak and Padus virginiana.
- P. cupulaeformis B. & C.—On Fagus grandiflora.
- P. epileucus Fr.-On oak.
- P. fumosus (Pers.) Fr.
- P. giganteus (Pers.) Fr.—Specimens in N. Y. State Herbarium.
- P. gilvus Schw.—On Fagus grandiflora, oak, cherry and Xolisma ligustrina (abnormal specimens).
- P. hispidus (Bull.) Fr.—On living oak trees.
- P. Spraguei B. & C .- On oak.
- P. sulphureus (Bull.) Fr.—On stumps.

Polystictus circinatus Fr.—Greenport.

- P. hirsutus Fr.—On hickory and oak.
- P. pergamenus Fr.—On oak, cherry and Fagus grandiflora.
- P. velutinus (Pers.) Fr.—On Xolisma ligustrina.
- P. versicolor (L.) Fr.—On hickory and oak.

Poria attenuata Pk .- On hickory.

P. contigua (Pers.) Fr.—On Robinia Pseudo-Acacia.

- P. ferruginosa (Schrad.) Fr.-On Ilex verticillata.
- P. floccosa Fr.—On oak, Sassafras Sassafras, Malus Malus, Padus virginiana and Acer rubrum.
- P. inermis E. & E.—On Ilex verticillata and Toxicodendron radicans; specimens in N. Y. State Herbarium.
- P. nitida (Pers.) Fr.—On cherry.
- P. reticulata (Pers.) Fr.—On Juniperus virginiana.
- P. subacida Pk.
- P. subacida vesiculosa (B. & C.) Pk.—Specimens in N. Y. State Herbarium.
- P. vulgaris Fr.—On Juniperus virginiana.

Strobilomyces strobilaceus (Scop.) Berk.—Sandy woods.

Trametes cinnabarina (Jacq.) Fr.—On cherry.

- T. Pini (Brot.) Fr.—On pine; specimens in N. Y. State Herbarium.
- T. sepium Berk.—On willow, hickory and cherry.
- T. suaveolens (L.) Fr.—On willow.

AGARICACEAE

Agaricus abruptibulbus Pk.—In cedar woods.

- A. campester L.
- A. micromegethus Pk.—In sandy soil.
- A. Rodmani Pk.

Amanita Frostiana Pk.

- A. Frostiana pallidipes Pk.
- A. glabriceps Pk.
- A. muscaria L.—Cedar woods.
- A. muscaria formosa (G. & R.) Fr.
- A. phalloides Fr.—A gray variety.
- A. verna Fr.

Amanitopsis strangulata (Fr.) Roze

- A. vaginata (Bull.) Roze
- A. vaginata livida (Pers.) Pk.

Armillaria mellea Vahl

A. nardosmia Ellis-Greenport.

Cantharellus infundibuliformis (Scop.) Fr.

C. minor Pk.

Clitocybe brumalis Fr.—In cedar woods.

- C. clavipes (Pers.) Fr.
- C. dealbata Sow.
- C. odora (Bull.) Fr.
- C. pithyophila Fr.—Specimens in N. Y. State Herbarium.

Clitopilus abortivus B. & C.

- C. albogriseus Pk.
- C. orcella (Bull.) Fr.
- Collybia dryophila (Bull.) Fr.
- C. platyphylla Fr.
- C. radicata (Relh.) Fr.—A form approaching var. pusilla Pk.
- C. tuberosa (Bull.) Fr.—On decaying Lactarius; specimens in N. Y. State Herbarium.

C. velutipes (Curt.) Fr.

Coprinus micaceus (Bull.) Fr.

C. plicatilis (Curt.) Fr.

Cortinarius heliotropicus Pk.—Greenport.

Entoloma Grayanum Pk.

E. jubatum Fr.

Hygrophorus chlorophanus Fr.

H. laetus (Pers.) Fr.—Specimens in N. Y. State Herbarium.

H. miniatus Fr.

H. miniatus subluteus Pk.-Specimens in N. Y. State Herbarium.

H. psittacinus (Schaeff.) Fr.

H. sordidus Pk.—Greenport; reported in N. Y. State Mus. Bull. 157: 28. 1912.

Hypholoma appendiculatum (Bull.) Fr.

H. incertum Pk.

H. perplexum Pk.

H. sublateritium (Schaeff.) Fr.—Growing in clusters about stumps of hickory and oak.

Laccaria amethystina (Bolt.) B. & Br. (in part)-Oak woods.

L. laccata (Scop.) B. & Br.

L. trullisata (Ellis) Pk.—In clean sand. (Clitocybe trullisata Ellis.)

Lactarius Peckii Burl.

L. piperatus (Scop.) Fr.

L. serifluus (DC.) Fr.

L. subdulcis (Bull.) Fr.

L. theiogalus (Bull.) Fr.

L. vellereus Fr.

L. volemus Fr.

Lentinus tigrinus (Bull.) Fr.—On dead trees; the diseased form which is known as Lentodium squamulosum Morg.

Lenzites betulina (L.) Fr.—On oak; specimens in N. Y. State Herbarium.

L. sepiaria Fr.—On pine (poroid form), Juniperus virginiana, Picea mariana and cherry; specimens in N. Y. State Herbarium.

L. trabea (Pers.) Fr.—On pine; reported in N. Y. State Mus. Bull. 167: 27. 1913.

Lepiota americana Pk.

L. clypeolaria (Bull.) Fr.

L. naucinoides Pk.—Cultivated fields.

Marasmius androsaceus (L.) Fr.

M. biformis Pk.—Swampy places.

M. capillaris Morg.—On grass stems.

M. elongatipes Pk.

M. epiphyllus Fr.—On old leaves; reported in N. Y. State Mus. Bull. 157: 28. 1912.

M. insititius Fr.—On leaves and twigs.

M. oreades Fr.

M. ramulinus Pk.—On branches in cedar woods.

M. salignus Pk.—On leaves and twigs.

M. salignus major Pk.

M. spongiosus B. & C.—Specimens in N. Y. State Herbarium.

M. subnudus (Ellis) Pk.

M. velutipes B. & C .- On leaves.

Mycena atroalboides Pk.

M. corticola (Schum.) Fr.—On bark of Robinia Pseudo-Acacia and grape vines.

M. epiptergyria (Scop.) Fr.

M. galericulata (Scop.) Fr.—On logs.

M. sanguinolenta (A. & S.) Fr.—Specimens in N. Y. State Herbarium.

Omphalia campanella (Batsch) Fr.—On decaying coniferous wood and moss.

Panaeolus papilionaceus Fr.

P. retirugis Fr.—Cultivated fields.

P. semiglobatus Murrill-Determined by Dr. W. A. Murrill.

Panus rudis Fr.—On old oak wood.

P. stypticus (Bull.) Fr.—On oak and Amygdalus persica stumps.

P. torulosus Fr.—On Baccharis halimifolia.

Pholiota praecox (Pers.) Fr.

Pleurotus ostreatus (Jacq.) Fr.—On old poplar logs.

P. septicus Fr.

Pluteus cervinus (Schaeff.) Fr.

Psathyrella disseminata (Pers.) Fr.

Russula compacta Frost

R. emetica Fr.

R. foetens (Pers.) Fr.-Southold.

R. foetentula Pk.—Southold.

R. Mariae Pk.

R. obscura Rom.—Greenport.

R. pectinatoides Pk.

R. purpurina Q. & S.—Orient and Greenport; specimens in N. Y. State Herbarium.

R. virescens (Schaeff.) Fr.-Greenport and Orient.

Schizophyllum commune Fr.—On hickory, cherry, Castanea sativa and Baccharis halimifolia.

Stropharia aeruginosa (Curt.) Fr.—On decaying wood.

S. semiglobata (Bastch) Fr.—On horse manure.

Tricholoma alboflavidum Pk.

T. personatum Fr.—In oak woods.

T. piperatum Pk.—Reported in N. Y. State Mus. Bull. 167: 32. 1913.

T. resplendens Fr.

T. Russula (Schaeff.) Fr.

T. seiunctum Sow.

Trogia crispa (Pers.) Fr.—On oak.

GASTEROMYCETES

Anthurus borealis Burt-Orient in corn fields.

Bovista pila B. & C.—In woods and fields.

B. plumbea Pers.

Calvatia craniiformis (Schw.) Morg.—In cedar woods; reported in N. Y. State Mus. Bull. 150: 24. 1911.

C. cyathiformis (Bosc) Morg.

C. rubroflava (Cragin)Morg.—Sandy soil; reported in N. Y. State Mus. Bull. 167: 24. 1913. Crucibulum vulgare Tul.-On hickory.

Cyathus stercoreus (Schw.) DeToni

C. vernicosus (Bull.) DC.-Sandy soil.

Geaster hygrometricus Pers.

G. minimus Schw.—Cedar woods.

Lycoperdon atropurpureum Vitt.

- L. cruciatum Rostk.—In cultivated fields and open woods.
- L. echinatum Pers.—Greenport.
- L. pusillum Batsch
- L. pyriforme Schaeff.—On decayed cherry logs.
- L. Wrightii B. & C.-Greenport.

Phallus impudicus L.

Polysaccum pisocarpium Fr.—Southold and Orient on the ground in woods; reported in N. Y. State Mus. Bull. 157: 32. 1912.

Scleroderma flavidum E. & E.—In cedar woods; specimens in N. Y. State Herbarium.

- S. Geaster Fr .- In sandy soil; specimens in N. Y. State Herbarium.
- S. tenerum B. & C.—In cedar woods.
- S. verrucosum (Bull.) Pers.—Greenport.
- S. vulgare Hornem.—In cedar woods; specimens in N. Y. State Herbarium.

LICHENES

- Arthonia lecideella Nyl.—On! is of Tilia americana; determined by Dr. Bruce Fink.
- A. quintaria Nyl.—On A nthus glandulosa and Rhus bark; determined by G. K. Merrill; reported in N. Y. State Mus. Bull. 167: 23. 1913.
- A. radiata (Pers.) Th. Fr.—On hickory, Fagus grandiflora, Amelanchier, Acer rubrum and Tilia americana bark. (Arthonia astroidea Ach.)

Baeomyces roseus Pers.—East Marion on earth in woods.

Biatora flexuosa Fr.—Dead limbs of Juniperus virginiana; determined by Dr. H. E. Hasse.*

- B. varians (Ach.) Tuck.—Determined by Dr. Hasse.
- B. vernalis (L.) Fr.—On cedar fence rails; determined by Dr. Hasse.
- Biatora (§ Biatorina) cyrtella (Ach., Nyl.) Tuck.—Determined by Dr. Hasse.
- Biatora (§ Bacidia) rubella (Ehrh.) Rabenh.—On bark of Juniperus virginiana and Toxicodendron radicans; determined by Dr. L. W. Riddle.
- B. (§ Bacidia) Schweinitzii Fr.—On Juniperus virginiana; determined by Dr. Hasse.

Biatora (§ Biatorella) simplex (Dav.)—On rocks; determined by Dr. Hasse.

Cetraria Islandica (L.) Ach.—Partly determined by Dr. Hasse.

Cladonia alpestris (L.) Rabenh.

- C. bacillaris clavata (Ach.) Wainio-On pine bark and Juniperus virginiana stumps.
- C. Boryi Tuck., forma reticulata (Russell) Merrill—Specimens in N. Y. State Herbarium.
- C. caespiticia (Pers.) Flk.—Sandy soil at East Marion.
- C. cariosa cribosa (Wallr.) Wainio-On earth.
- C. cristatella Tuck.-On old coniferous logs.
- *Specimens of the Lichens named by Dr. Hasse are preserved in the Lichen Herbarium of The Sullivant Moss Society.

- C. cristatella ochrocarpia Tuck.—Determined by Dr. Hasse.
- C. cristatella vestita Tuck.—Greenport; reported in N. Y. State Mus. Bull. 167: 34. 1913.
- C. digitata (Ach.) Schaer.—Light soil in open woods at Orient and East Marion; determined by Dr. Hasse.
- C. digitata ceruchoides Wainio-Determined by Dr. Hasse.

Cladonia fimbriata radiata (Schreb.) Fr.—Sandy soil; determined by Dr. Hasse.

- C. furcata (Huds.) Schrad .- On earth.
- C. furcata pinnata (Flk.) Wainio, f. foliolosa Del.—Determined by Dr. Hasse.
- C. furcata racemosa (Hoffm.) Flk.—Determined by Dr. Hasse.
- C. gracilis dilatata (Hoffm.) Wainio—Sandy soil; determined by Dr. Riddle; reported in N. Y. State Mus. Bull. 167: 34. 1913.
- C. macilenta (Ehrh.) Hoffm.—A composite species on coniferous wood; partly determined by Dr. Hasse.
- C. mitrula Tuck.
- C. pyxidata chlorophaea (Spreng.) Flk.—Determined by Dr. Hasse.
- C. pyxidata neglecta (Flk.) Mass.—On limbs of Juniperus virginiana and on earth.
- C. pyxidata neglecta, m. lophyra Ach.—Determined by Dr. Hasse.
- C. rangiferina (L.) Weber
- C. squamosa (Scop.) Hoffm.—A variety of this composite species; determined by Dr. Hasse.
- C. sylvatica (L.) Rabenh.
- C. turgida conspicua (Schaer.) Nyl.—Determined by Dr. Hasse.
- C. uncialis (L.) Fr.—A variety of this composite species.
- C. verticillata Hoffm.
- Collema (§ Synechoblastus) nigrescens (Huds.) Ach.—On Juniperus virginiana trees; determined by Dr. Hasse.
- Graphis dendritica Ach., f. obtusa Leight.—On bark of Acer rubrum; determined by Dr. Hasse.
- G. scripta (L.) Ach.—On hickory, oak and Fagus grandiflora bark.
- G. scripta recta (Humb.) Koerb.—Determined by Dr. Hasse.
- G. scripta serpentina (Ach.) Nyl.—Determined by Dr. Hasse.
- Lecanora (§ Candelaria) laciniosa (Duf.) Nyl.—On Juniperus virginiana and Nyssa sylvatica; also old leather. (Teloschistes concolor (Dicks.) Tuck.)
- L. (§ Candelaria) laciniosa effuse (Tuck.) n. comb.—Reported in N. Y. State Mus. Bull. 150: 49. 1911.
- Lecanora (§ Callopisma) camptidia (Tuck.) Nyl.—On oak bark at Orient; determined by Dr. Riddle; reported in N. Y. State Mus. Bull. 167: 30. 1913. (Placodium camptidium Tuck.)
- L. (§ Callopisma) cerina (Ehrh.) Ach.—On Juniperus virginiana; determined by Dr. Fink; specimens in N. Y. State Herbarium.
- Lecanora (§ Callopisma) ferruginea discolor (Willey) n. comb.—On Juniperus virginiana; determined by Dr. Fink; reported in N. Y. State Mus. Bull. 150: 37. 1911.
- L. (§ Callopisma) ferruginea nigricans (Tuck.) Nyl.—Determined by Dr. Hasse.
- Lecanora (§ Rinodina) ascociscana (Tuck.) Nyl.—Bark of trees; determined by Dr. Hasse.
- L. (§ Rinodina) exigua (Ach.) Th. Fr.—Determined by Dr. Hasse.

L. (§ Rinodina) sophodes (Ach.) Koerb.—On bark of Baccharis halimifolia; determined by Dr. Riddle.

Lecanora Hageni Ach.—Determined by Dr. Hasse.

- L. pallida (Schreb.) Tuck.—On bark of Ilex verticillata.
- L. pallida cancriformis (Hoffm.) Tuck.—On bark of oak and Amelanchier; determined by both Dr. Fink and Dr. Riddle.
- L. subfusca (L., Nyl.) Ach.—On bark of oak, Juniperus virginiana and Robinia Pseudo-Acacia; partly determined by Dr. Fink.
- L. subfusca allophana Ach.—On limbs of Juniperus virginiana; determined by Dr. Riddle; specimens in N. Y. State Herbarium.
- L. subfusca rugosa (Pers.) Cromb.—Determined by Dr. Hasse.
- L. symmictera Nyl.-Determined by Dr. Hasse.
- L. varia (Ehrh.) Ach.—On bark of Juniperus virginiana and Pyrus communis.
- L. varia saepincola Fr.—On old chestnut fence post; reported in N. Y. State Mus. Bull. 150: 46. 1911.

Lecanora (§ Aspicilia) cinerea (L.) Sommf.—On rocks.

Lecanora (§ Acarospora) cervina squamulosa Fr.—Determined by Dr. Hasse.

L. (§ Acarospora) fuscata (Schrad.) Fr.—On rocks; determined by Dr. Hasse.

Lecidea (§ Buellia) disciformis (Fr.) Nyl.—On oak, Amygdalus persica, Robinia Pseudo-Acacia and Sambucus canadensis bark; Greenport on bark of Fagus grandistora; partly determined by Dr. Hasse.

L. (§ Buellia) myriocarpa (DC.) Nyl.—On pine, Juniperus virginiana and Rhus bark; partly determined by Dr. Fink, also Dr. Hasse; specimens in N. Y. State Herbarium.

Lecidea albocaerulescens (Wulf.) Schaer.—Determined by Dr. Hasse.

Leptogium tremelloides (L. f.) S. F. Gray-On Juniperus virginiana.

Myriangium Duriaei (Mont. & Berk.) Tuck.—On bark of Fraxinus americana at East Marion; determined by Dr. Hasse.

Opegrapha herpetica Ach.—On bark of Tilia americana; determined by Mr. Merrill; reported in N. Y. State Mus. Bull. 167: 29. 1913.

O. varia Pers.—On bark of hickory, Ailanthus glandulosa and Tilia americana; in part determined by Dr. Riddle.

O. varia pulicaris (Ach.) Nyl.—Determined by Dr. Hasse.

Opegrapha vulgata Ach.—Determined by Dr. Hasse.

Pannaria luridum (Mont.) Nyl.—Rare at Orient on bark of Juniperus virginiana; determined by Dr. Fink; specimens in N. Y. State Herbarium. (Physma luridum (Mont.) Tuck.)

Parmelia caperata (L.) Ach.—On Juniperus virginiana.

P. colpodes Ach.—Rare at Orient; specimens in N. Y. State Herbarium.

P. conspersa (Ehrh.) Ach.—On rocks.

P. crinita pilosella (Hue) Merrill-On Juniperus virginiana.

P. dubia (Wulf.) Schaer.—On trunks of oak. (Parmelia Borreri Tuck.)

P. dubia hypomela (Tuck.) n. comb.—On Juniperus virginiana; reported in N. Y. State Mus. Bull. 150: 47. 1911.

P. exasperata (Ach.) DN.—Determined by Dr. Hasse. (Parmelia olivacea aspidota Ach.)

- P. hyperopta Ach.—Determined by Dr. Hasse.
- P. olivacea (L.) Ach.—On oak bark.

- P. perforata (Jacq.) Ach.—On oak; specimens in N. Y. State Herbarium.
- P. perforata hypotropa (Nyl.) Tuck.—On Juniperus virginiana; determined by Dr. Fink; reported in N. Y. State Mus. Bull. 150: 47. 1911.
- P. rudecta Ach.—On Juniperus virginiana; specimens in N. Y. State Herbarium. (Parmelia Borreri rudecta (Ach.) Tuck.)
- P. saxatilis (L.) Fr.—On rocks.
- P. sulcata Tayl.—Specimens in N. Y. State Herbarium. (Parmelia saxatilis sulcata Nyl.)
- P. tiliacea Ach.—On trunks of Malus Malus.
- Peltigera canina (L.) Hoffm.—On earth; determined by Dr. Hasse.
- Pertusaria communis Lam. & DC.—On hickory, oak and Fagus grandiflora; determined by both Dr. Fink and Mr. Merrill.
- P. leioplaca (Ach.) Schaer.—On Quercus velutina; determined by Mr. Merrill; specimens in N. Y. State Herbarium.
- P. multipuncta (Turn.) Nyl.—On hickory; in part determined by Dr. Hasse.
- P. pustulata (Ach.) Nyl.—Orient and Greenport on Myrica carolinensis; determined by Mr. Merrill.
- P. velata (Turn.) Nyl.-Determined by Dr. Fink.
- P. Wulfenii Lam. & DC.—On oak at East Marion; determined by Dr. Hasse.
- Physcia (§ Xanthoria) parietina (L.) DN.—Determined by Dr. Hasse. (Teloschistes parietinus (L.) Norm.).
- P. (§ Xanthoria) parietina aureola (Ach.) Nyl.—On Robinia Pseudo-Acacia; determined by Dr. Hasse.
- P. (§ Xanthoria) polycarpa (Ehrh.) Nyl.—Determined by Dr. Hasse.
- Physcia (§ Pseudophyscia) hypoleuca (Muhl.) Tuck.—Rare at Orient on Juniperus virginiana bark; determined by Miss Mary F. Miller; specimens in N. Y. State Herbarium.
- P. (§ Pseudophyscia) speciosa (Wulf.) Nyl.—Determined by Dr. Hasse.
- Physcia hispida (Schreb.) Tuck.—Orient, very rare on a Juniperus virginiana stump; determined by Dr. Fink; reported in N. Y. State Mus. Bull. 150: 36. 1911.
- P. obscura (Ehrh.) Nyl.—On bark of Juniperus virginiana; determined by Dr. Hasse.
- P. obscura endochrysea (Hampe) Nyl.—On Juniperus virginiana.
- P. stellaris (L.). Nyl.—On Juniperus virginiana; specimens in N. Y. State Herbarium.
- P. tribacia (Ach.) Nyl.—On Juniperus virginiana and Robinia Pseudo-Acacia; also on rocks.
- Platysma aurescens (Tuck.) Nyl.—Determined by Dr. Hasse. (Cetraria aurescens Tuck.)
- P. ciliare (Ach.) Nyl.
- P. Fendleri (Tuck.) Nyl.—Determined by Dr. Hasse.
- P. glaucum (L.) Nyl.—Determined by Dr. Hasse.
- P. lacunosum (Ach.) Nyl.
- Pyrenula nitida Ach.—Greenport on trunks of Fagus grandiflora.
- Pyxine sorediata (Ach.) Fr.—On oak, Juniperus virginiana and Robinia Pseudo-Acacia bark.
- Ramalina calicaris (L.) Nyl.—On Juniperus virginiana; in part determined by Dr. Hasse.

- R. calicaris subampliata Nyl.—On Juniperus virginiana; reported in N. Y. State Mus. Bull. 150: 47. 1911, as Ramalina calicaris fraxinea Fr.
- R. subfastigiata Nyl.—On oak, Juniperus virginiana and Robinia Pseudo-Acacia; determined by Dr. Hasse.
- R. tenuis Tuck., Merrill—On Juniperus virginiana; reported in N. Y. State Mus. Bull. 150: 38. 1911, as Ramalina rigida (Pers.) Ach.
- Sagedia cestrensis Tuck.—Orient on bark of hickory and Tilia americana; determined by Miss Miller; reported in N. Y. State Mus. Bull. 157: 33. 1912.
- Teloschistes chrysopthalmus (L.) Th. Fr.—Determined by Dr. Hasse, who says, "an unusual form on account of almost entire absence of fibrillae."
- T. flavicans (Sw.) Norm.—Orient on Juniperus virginiana; determined by Dr. Fink; reported in N. Y. State Mus. Bull. 150: 39. 1911.
- Usnea ceratina Ach.—Determined by Dr. Hasse, who says, "the color of the thallus is unusually dark."
- U. florida (L.) Hoffm.—On pine and Juniperus virginiana; determined by Dr. Hasse.
- U. florida rubiginea Mx.—On Juniperus virginiana.
- U. hirta (L.) Hoffm.
- U. trichodea Ach.—On Juniperus virginiana; reported in N. Y. State Mus. Bull. 150: 40. 1911.

Xylographa parallela (Ach.) Fr.—Determined by Dr. Hasse.

HEPATICAE

Anthoceros laevis L.

Calypogeia Sullivanti Aust.—Determined by G. B. Kaiser.

C. Trichomanis (L.) Cda.—Determined by Miss Annie Lorenz.

Cephalozia curvifolia (Dicks.) Dumort.—On an old log in wet woods at Greenport; determined by Dr. G. B. Conklin.

Frullania Asagrayana Mont.—On a rock in swampy woods; determined by both Dr. Conklin and Mr. Kaiser.

F. eboracensis Gottsche-On bark of Juniperus virginiana.

Lophocolea heterophylla (Schrad.) Dumort.—Determined by Dr. Conklin.

Marchantia polymorpha L .- Determined by Dr. Conklin.

Odontoschisma prostratum (Sw.) Trev.—Determined by Miss Lorenz; specimens in N. Y. State Herbarium.

Pellia epiphylla (L.) Cda.-On earth.

Porella pinnata L.—Trunks of bushes in swamps; determined by Mr. Kaiser.

P. platyphylla (L.) Lindb.—Trunks of trees.

Ptilidium pulcherrimum (Web.) Hampe

Radula complanata (L.) Dumort.

Ricciella fluitans (L.) A. Br.—On mud in a pond; determined by Mr. Kaiser.

Riccia Sullivantii (Aüst.) Evans.

Ricciocarpus natans (L.) Cda.—Floating in water.

Musci

Amblystegium riparium B. & S .- In swamps.

A. riparium longifolium (Schultz) B. & S.-Determined by G. B. Kaiser.*

A. serpens (L.) B. & S.

Anomodon attenuatus (Schreb.) Hueb.—About base of trees in woods at Greenport; determined by Mr. Kaiser.

A. rostratus (Hedw.) Schimp.—Determined by Mr. Kaiser.

Aulacomnium palustre (L.) Schwaegr.-In swamps.

Brachythecium oxycladon (Brid.) J. & S.—On trunks of trees.

B. rivulare B. & S.-Wet places.

B. rutabulum (L.) B. & S.—Sandy soil.

B. velutinum (L.) B. & S.—On soil at base of trees.

Bryhnia Novae-Angliae (S. & L.) Grout-Swamps at Greenport.

Bryum caespiticium L.—Greenport; determined by Dr. A. W. Evans.

Campylium hispidulum (Brid.) Mitt.—Determined by Mr. Kaiser.

C. radicale (Bv.) Grout-Determined by Mr. Kaiser.

Catharinea angustata Brid.—Shaded sandy soil.

C. undulata (L.) W. & M.

Ceratodon purpureus (L.) Brid.—Sandy soil.

Climacium Kindbergii (R. & C.) Grout—On roots of trees in wet places; reported in N. Y. State Mus. Bull. 150: 25. 1911.

Dichelyma capillaceum B. & S.—On Cephalanthus occidentalis in a swamp.

Dicranella heteromalla (L.) Schimp.

Dicranum Drummondii CM.—Wet woods at Greenport; determined by Mr. Kaiser.

D. flagellare Hedw.

D. fulvum Hook.-Determined by Mr. Kaiser.

D. pallidum B. & S.—Sandy beach in open cedar woods; determined by Mr. Kaiser.

D. scoparium (L.) Hedw.

Ditrichum pallidum (Schreb.) Hampe—In cedar woods.

Drepanocladus aduncus gracilescens (Schimp.)—In swamps.

D. fluitans (Dill.) Warnst.-East Marion.

Entodon seductrix (Hedw.) CM.—Wet log in a swamp; determined by Mr. Kaiser Eurhynchium hians (Hedw.) J. & S.—Sandy soil.

E. serrulatum (Hedw.) Kindb.—Determined by Mr. Kaiser.

E. strigosum (Hoffm.) B. & S.

Fontinalis Sullivantii Lindb.—Greenport on roots and trunks of bushes in a swamp; determined by Mr. Kaiser.

Funaria flavicans Mx.

F. hygrometrica (L.) Sibth.—Greenport; determined by Dr. Evans.

Hedwigia albicans (Web.) Lindb.—Base of oak trees.

Hypnum cupressiforme L.—Determined by Mr. Kaiser.

H. cupressiforme resupinatum (Wils.) Schimp.—Determined by Mr. Kaiser.

H. curvifolium Hedw.

H. Haldanianum Grev.—On old logs and stumps; in part determined by Mr. Kaiser.

H. imponens Hedw.-Moist places.

H. Patientiae Lindb.-Determined by Mr. Kaiser.

H. recurvans (Mx.) Schwaegr.—On moist earth; determined by Mr. Kaiser.

H. reptile Mx.—Greenport in moist woods; determined by Mr. Kaiser.

Leptobryum pyriforme (L.) Wils.

* Specimens of the Mosses named by G. B. Kaiser are preserved in the Moss Herbarium of The Sullivant Moss Society. Leucobryum glaucum (L.) Schimp.

Leucodon brachypus Brid.—On bark of Juniperus virginiana; determined by Mr. Kaiser.

L. julaceus (Hedw.) Sull.—On Juniperus virginiana bark.

Mniobryum albicans (Wahl.) Limpr.—Determined by Mr. Kaiser.

Mnium affine ciliare (Grev.) CM .- Wet places.

M. cuspidatum (L.) Leyss—On rotten logs and moist soil; in part determined by Mr. Kaiser.

M. hornum L.—Edge of a swamp.

M. rostratum Schrad.

Orthotrichum strangulatum Sull.-Greenport on trees; determined by Mr. Kaiser.

Physcomitrium turbinatum (Mx.) Brid.—Greenport; determined by Dr. Evans.

Plagiothecium denticulatum (L.) B. & S.—Wet places at Greenport.

P. Ruthei Limpr.—Determined by Mr. Kaiser.

P. striatellum (Brid.) Lindb.—Greenport in moist soil; determined by Mr. Kaiser.

P. sylvaticum (Huds.) B. & S.—Sandy soil; determined by Mr. Kaiser.

P. turfaceum Lindb.—On stumps of Juniperus virginiana.

Pleuridium subulatum (L.) Rabenh.—Determined by Mr. Kaiser.

Pogonatum brachyphyllum (Mx.) Bv.—Orient; determined by G. B. Nichols.

Pohlia nutans (Schreb.) Lindb.—Greenport in light soil in woods; also on sandy beach at Orient; determined by Mr. Kaiser.

Polytrichum commune L.—Dry woods.

P. juniperinum Willd.—Determined by G. B. Kaiser.

P. Ohioense B. & C.—Wet woods at Greenport; determined by Mr. Kaiser.

P. piliferum Schreb.

Pylaisia Schimperi R. & C.

Sphagnum acutifolium Ehrh.—Determined at Bureau of Plant Industry.

S. cuspidatum Ehrh.—Wet open meadow; determined by Mr. Kaiser.

S. cymbifolium Ehrh.—Determined at Bureau of Plant Industry.

S. recurvum Bv.—Determined at Bureau of Plant Industry.

S. Torreyanum Sull.—Boggy woods at Greenport; determined by Mr. Kaiser.

Thelia hirtella (Hedw.) Sull.—Base of oak and other trees.

T. Lescurii Sull.—Sandy soil; determined by Mr. Kaiser.

Thuidium delicatulum (L.) Mitt.

T. paludosum (Sull.) Rau & Herv.—Wet open soil; determined by Mr. Kaiser.

T. scitum (Bv.) Aust.—Base of oak trees; determined by Mr. Kaiser.

Tortella caespitosa (Schwaegr.) Limpr.—Sandy beach; determined by Mr. Kaiser. Ulota americana (By.) Lindb.—Rocks.

U. crispa Brid.—Bark of an old oak; determined by Mr. Kaiser.

Webera sessilis (Schmid.) Lindb.—On rich banks at Greenport.

Weisia viridula (L.) Hedw.-Sandy soil.

(To be continued.)